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Page 1

Connecting via Winsock to STN

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* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	JAN 27	Source of Registration (SR) information in REGISTRY updated and searchable
NEWS	4	JAN 27	A new search aid, the Company Name Thesaurus, available in CA/Caplus
NEWS	5	FEB 05	German (DE) application and patent publication number format changes
NEWS	6	MAR 03	MEDLINE and LMEDLINE reloaded
NEWS	7	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS	8	MAR 03	FRANCEPAT now available on STN
NEWS	9	MAR 29	Pharmaceutical Substances (PS) now available on STN
NEWS	10	MAR 29	WPIFV now available on STN
NEWS	11	MAR 29	New monthly current-awareness alert (SDI) frequency in RAPRA
NEWS	12	APR 26	PROMT: New display field available
NEWS	13	APR 26	IFIPAT/IFIUDB/IFICDB: New super search and display field available
NEWS	14	APR 26	LITALERT now available on STN
NEWS	15	APR 27	NLDB: New search and display fields available
NEWS	16	May 10	PROUSDDR now available on STN
NEWS	17	May 19	PROUSDDR: One FREE connect hour, per account, in both May and June 2004
NEWS	18	May 12	EXTEND option available in structure searching
NEWS	19	May 12	Polymer links for the POLYLINK command completed in REGISTRY
NEWS	20	May 17	FRFULL now available on STN
NEWS	21	May 27	STN User Update to be held June 7 and June 8 at the SLA 2004 Conference
NEWS	22	May 27	New UPM (Update Code Maximum) field for more efficient patent SDIs in Caplus
NEWS	23	May 27	Caplus super roles and document types searchable in REGISTRY
NEWS	24	May 27	Explore APOLLIT with free connect time in June 2004
NEWS EXPRESS		MARCH 31	CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 15:09:39 ON 17 JUN 2004

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 15:10:00 ON 17 JUN 2004

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 16 JUN 2004 HIGHEST RN 694434-66-7

DICTIONARY FILE UPDATES: 16 JUN 2004 HIGHEST RN 694434-66-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> isophoronenitrile/cn

ISOPHORONENITRILE IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> s isophoronenitrile/cn

L1 1 ISOPHORONENITRILE/CN

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 7027-11-4 REGISTRY

CN Cyclohexanecarbonitrile, 1,3,3-trimethyl-5-oxo- (7CI, 8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

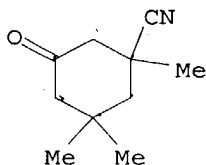
CN 3-Cyano-3,5,5-trimethylcyclohexanone

CN 3-Oxo-1,5,5-trimethylcyclohexanecarbonitrile

CN **Isophoronenitrile**

CN NSC 171143

FS 3D CONCORD
 DR 144975-27-9, 78948-79-5
 MF C10 H15 N O
 LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
 RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)
 DT.CA Caplus document type: Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); FORM (Formation,
 nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process);
 RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.P Roles for non-specific derivatives from patents: PREP (Preparation);
 RACT (Reactant or reagent)
 RL.NP Roles from non-patents: BIOL (Biological study); MSC (Miscellaneous);
 PREP (Preparation); RACT (Reactant or reagent); NORL (No role in record)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

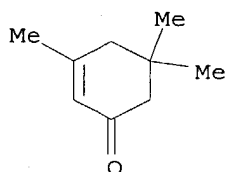
88 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 88 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s isophorone/cn
 L2 1 ISOPHORONE/CN

=> d

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 78-59-1 REGISTRY
 CN 2-Cyclohexen-1-one, 3,5,5-trimethyl- (8CI, 9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN α -Isophoron
 CN α -Isophorone
 CN 1,1,3-Trimethyl-3-cyclohexene-5-one
 CN 1,5,5-Trimethyl-3-oxocyclohexene
 CN 1-Cyclohexen-3-one, 1,5,5-trimethyl-
 CN 3,5,5-Trimethyl-2-cyclohexen-1-one
 CN 3,5,5-Trimethyl-2-cyclohexene-1-one
 CN 3,5,5-Trimethyl-2-cyclohexenone
 CN Isoacetophorone
 CN Isoforon
 CN Isophoron
 CN **Isophorone**

CN NSC 403657
 CN NSC 4881
 FS 3D CONCORD
 MF C9 H14 O
 CI COM
 LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL, VTB
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)
 DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent; Preprint; Report
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.P Roles for non-specific derivatives from patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2503 REFERENCES IN FILE CA (1907 TO DATE)
 20 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 2506 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 23 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file casreact
 COST IN U.S. DOLLARS
 FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
14.50	14.71

FILE 'CASREACT' ENTERED AT 15:13:02 ON 17 JUN 2004
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FILE CONTENT:1840 - 13 Jun 2004 VOL 140 ISS 24

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*****
*
*   CASREACT now has more than 8 million reactions
*
*****
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Some records from 1974 to 1991 are derived from the ZIC/VINITI data file and provided by InfoChem and some records are produced using some INPI data from the period prior to 1986.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Crossover limits have been increased. See HELP RNCROSSOVER for details.

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=>

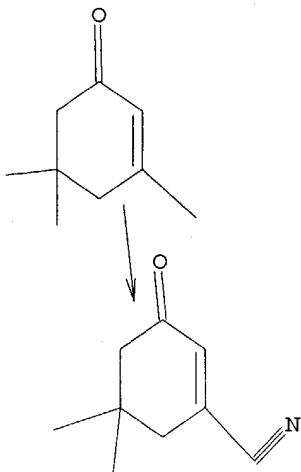
Uploading C:\Program Files\Stnexp\Queries\10701513.str

L3 STRUCTURE UPLOADED

=> d

L3 HAS NO ANSWERS

L3 STR



Structure attributes must be viewed using STN Express query preparation.

=> s L3

SAMPLE SEARCH INITIATED 15:13:41 FILE 'CASREACT'
SCREENING COMPLETE - 2 REACTIONS TO VERIFY FROM 2 DOCUMENTS

100.0% DONE 2 VERIFIED 0 HIT RXNS 0 DOCS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED VERIFICATIONS: 2 TO 124
PROJECTED ANSWERS: 0 TO 0

L4 0 SEA SSS SAM L3 (0 REACTIONS)

=> s L3 full

FULL SEARCH INITIATED 15:13:52 FILE 'CASREACT'
SCREENING COMPLETE - 8 REACTIONS TO VERIFY FROM 6 DOCUMENTS

100.0% DONE 8 VERIFIED 0 HIT RXNS 0 DOCS
SEARCH TIME: 00.00.01

L5 0 SEA SSS FUL L3 (0 REACTIONS)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	103.98	118.69

FILE 'CAPLUS' ENTERED AT 15:15:24 ON 17 JUN 2004
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FILE COVERS 1907 - 17 Jun 2004 VOL 140 ISS 25
FILE LAST UPDATED: 16 Jun 2004 (20040616/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 15:09:39 ON 17 JUN 2004)

FILE 'REGISTRY' ENTERED AT 15:10:00 ON 17 JUN 2004

L1 1 S ISOPHORONENITRILE/CN
L2 1 S ISOPHORONE/CN

FILE 'CASREACT' ENTERED AT 15:13:02 ON 17 JUN 2004

L3 STRUCTURE UPLOADED
L4 0 S L3
L5 0 S L3 FULL

FILE 'CAPLUS' ENTERED AT 15:15:24 ON 17 JUN 2004

=> s L1
L6 88 L1

=> s L2
L7 2508 L2

=> s L6 and L7
L8 28 L6 AND L7

=> s L8 and (HCN or hydrogen cyanide)
22796 HCN
823229 HYDROGEN
75403 CYANIDE
8638 HYDROGEN CYANIDE
(HYDROGEN (W) CYANIDE)
L9 18 L8 AND (HCN OR HYDROGEN CYANIDE)

=> s L9 and ?oxide
2400861 ?OXIDE
L10 7 L9 AND ?OXIDE

=> d L8 1-28 ibib abs

L8 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:386596 CAPLUS

DOCUMENT NUMBER: 140:391385

TITLE: Regioselective hydrocyanation process for the calcium
oxide-catalyzed preparation of isophorone nitrile from
hydrogen cyanide and isophorone

INVENTOR(S): Kunsmann-Keitel, Dagmar; Braun, Gerold; Muenster,
Ingo; Munding, Klaus; Scherhag, Gunter; Siegel,
Wolfgang

PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany

SOURCE: Eur. Pat. Appl., 5 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1418172	A2	20040512	EP 2003-25652	20031107
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
DE 10251680	A1	20040519	DE 2002-10251680	20021107
JP 2004155785	A2	20040603	JP 2003-375444	20031105
US 2004092761	A1	20040513	US 2003-701513	20031106

PRIORITY APPLN. INFO.:

DE 2002-10251680 A 20021107

AB A regioselective hydrocyanation process for the calcium oxide-catalyzed
preparation of isophorone nitrile from hydrogen cyanide and isophorone is
presented in which the calcium oxide regioselective hydrocyanation
catalyst has a BET surface area of >1.5 m²/g.

L8 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:96029 CAPLUS
DOCUMENT NUMBER: 132:124501
TITLE: Hydrocyanation process and catalyst for the
preparation of 3-cyano-3,5,5-trimethylcyclohexanone
from isophorone and hydrogen cyanide
INVENTOR(S): Fischer, Jakob; Siegel, Wolfgang; Bomm, Volker;
Fischer, Martin; Munding, Klaus
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6022988	A	20000208	US 1999-372062	19990811
DE 19836474	A1	20000217	DE 1998-19836474	19980812
EP 985659	A1	20000315	EP 1999-115469	19990805
EP 985659	B1	20031029		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: DE 1998-19836474 A 19980812

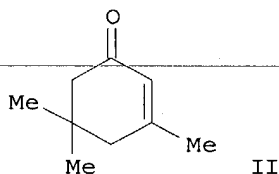
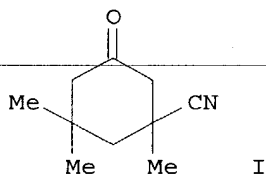
AB 3-Cyano-3,5,5-trimethylcyclohexanone is prepared in high yield and selectivity by reacting isophorone with hydrogen cyanide at 80-220° in the presence of the betaine catalyst 1,3-dimethylimidazolium-4-carboxylate.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:662214 CAPLUS
DOCUMENT NUMBER: 132:49772
TITLE: Synthesis of 3H-labeled 2-hydroxy-N-[(1,3,3-trimethyl-
[4,5,6-3H]cyclohexyl)methyl]-5-azidobenzamide, a
photoaffinity analog of an influenza fusion inhibitor
AUTHOR(S): Dischino, Douglas D.; Cianci, Christopher; Krystal,
Mark; Meanwell, Nicholas A.; Morimoto, Hiromi; Pearce,
Bradley C.; Williams, Philip; Yu, Kuo-Long
CORPORATE SOURCE: The Richard L. Gelb Center for Research and
Development, Bristol-Myers Squibb Company,
Wallingford, CT, 06492-7660, USA
SOURCE: Journal of Labelled Compounds & Radiopharmaceuticals
(1999), 42(10), 965-974
CODEN: JLCRD4; ISSN: 0362-4803
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The title compound was prepared by tritiation of a mixture of
N-(tert.-butoxycarbonyl)-1,3,3-trimethylcyclohex-4- and -5-enylmethylamine
via T2 and Pd/C, followed by coupling of the deprotected tritiated
with 5-azidoacetylsalicylic acid chloride, followed by deprotection
target compound was obtained with a radiochem. purity > 99% and a
activity of 63 Ci/mmol.
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE
RECORD. ALL CITATIONS AVAILABLE IN THE

L8 ANSWER 4 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1995:907770 CAPLUS
 DOCUMENT NUMBER: 123:313436
 TITLE: Process for the preparation of 3-cyano-3,5,5-trimethylcyclohexanone [isophorone nitrile]
 INVENTOR(S): Mundinger, Klaus; Laqua, Gerhard; Witzel, Tom; Merger, Franz
 PATENT ASSIGNEE(S): BASF A.-G., Germany
 SOURCE: Eur. Pat. Appl., 8 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 671384	A1	19950913	EP 1995-102923	19950302
EP 671384	B1	19991103		
R: BE, DE, FR, GB				
DE 4407487	A1	19950914	DE 1994-4407487	19940307
US 5516928	A	19960514	US 1995-395322	19950228
PRIORITY APPLN. INFO.:			DE 1994-4407487	19940307
OTHER SOURCE(S):		CASREACT 123:313436; MARPAT 123:313436		
GI				



AB The title compound (I), an intermediate for the monomer isophoronediamine, is prepared by a method using ~~improved~~ catalysts. Thus, isophorone (II) reacts with HCN to give I, at 80-180° and 0.5-20 bar, in the presence of an ammonium salt catalyst R₁R₂R₃R₄N⁺ X⁻ [R₁-R₄ = C₁-18 alkyl, C₅-8 cycloalkyl, aryl, C₇-18 aralkyl, C₂-18 hydroxyalkyl; X = OCO₂H, or OCO₂R₄ where R₄ = C₁-8 alkyl]. For example, a mixture of 3 mol HCN and 1.5 mol II was added over 60 min to a mixture of 4.5 mol II and 30 mmol Me₄N⁺ MeOCO₂⁻ at 120°. Acidification with 3.5 g 85% H₃PO₄ and distillation at 0.1 mbar gave I in 99% or 96.2% yield (based on unreacted II or fed HCN, resp.). In comparison, use of Et₄N⁺ CN⁻ catalyst gave 89.6% yield based on fed HCN. Also used as catalysts were BuMe₃N⁺ MeOCO₂⁻, and Et₃MeN⁺ MeOCO₂⁻, which gave similar results.

L8 ANSWER 5 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1995:401307 CAPLUS
 DOCUMENT NUMBER: 122:160152
 TITLE: Process for producing amines by reductive amination in the presence of a cobalt catalyst.
 INVENTOR(S): Furutani, Atsushi; Hibi, Takuo; Yamamoto, Michio; Tanaka, Kazuyuki; Tada, Kazuhiro; Fukao, Masami; Suzukamo, Gohfu

PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 623585	A1	19941109	EP 1994-300903	19940208
EP 623585	B1	19980422		
R: BE, DE, FR, GB				
JP 07101910	A2	19950418	JP 1994-6466	19940125
CA 2115024	AA	19941028	CA 1994-2115024	19940204
US 5589596	A	19961231	US 1994-194328	19940208
PRIORITY APPLN. INFO.:			JP 1993-101074	19930427
			JP 1993-180248	19930721
			JP 1993-180249	19930721
			JP 1993-196041	19930806
			JP 1993-197339	19930809

OTHER SOURCE(S): CASREACT 122:160152

AB A process is disclosed for producing amines by reductive amination of cyclic ketones or their imino derivs., characterized by use of a cobalt catalyst containing an alkaline earth metal carbonate and/or lanthanum oxide.

The new catalysts give high yields, are highly active, and are usable on a com. scale. For example, an aqueous solution of Co and Cu nitrates was treated with Ca carbonate, heated to 80°, and treated with aqueous Na carbonate to give a precipitate, which was retreated with aqueous Na carbonate, dried, heated

in N at 320°, cooled, granulated, and hydrogenated at 280° to give a catalyst. 3-Cyano-3,5,5-trimethylcyclohexanone was then passed with MeOH and liquid NH₃ through a first reactor containing active C at 24° and 150 kg/cm²G to give the imine derivative in 97.7% yield. This was passed through the above catalyst in a second reactor at 121° and the same pressure to give 3-aminomethyl-3,5,5-trimethylcyclohexylamine (I) in 99.4% yield, plus minor amts. of 2 byproducts. A comparison catalyst without the Cu nitrate or the Ca carbonate gave only 90.7% yield of I in the second step, with 5.8% 3-aminomethyl-3,5,5-trimethylcyclohexyl alc. and 3.2% 1,3,3-trimethyl-6-azabicyclo[3.2.1]octane as byproducts.

L8 ANSWER 6 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:630393 CAPLUS
DOCUMENT NUMBER: 121:230393
TITLE: Preparation of amines from cyclic ketones.
INVENTOR(S): Furutani, Atsushi; Hibi, Takuo; Yamamoto, Michio; Suzukamo, Gohfu
PATENT ASSIGNEE(S): Sumitomo Chemical Company, Ltd., Japan
SOURCE: Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 611137	A1	19940817	EP 1994-300915	19940208

EP 611137 B1 19960424
 R: BE, DE, FR, GB
 JP 06285370 A2 19941011 JP 1993-324532 19931222
 JP 07228562 A2 19950829 JP 1994-303 19940106
 CA 2115025 AA 19940809 CA 1994-2115025 19940204
 US 5395972 A 19950307 US 1994-194329 19940208
 PRIORITY APPLN. INFO.: JP 1993-20134 19930208
 JP 1993-319593 19931220

OTHER SOURCE(S): CASREACT 121:230393

AB Cyclic ketones were reacted with NH₃ in the presence of active C to produce imino derivs. which were reacted with H in the presence of a hydrogenation catalyst to give the corresponding amines. Thus, 3-cyano-3,5,5-trimethylcyclohexanone, MeOH, and NH₃ were fed to the first of a series of 2 connected reactors and H was added to the second reactor; the first packed with active C and the second packed with Co on silica. The temperature of the first reactor was 20° and that of the second was 114°; reactor pressure was 70 kg/cm²G. Product 3-aminomethyl-3,5,5-trimethylcyclohexylamine was formed in 94.9% yield.

L8 ANSWER 7 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:511943 CAPLUS
 DOCUMENT NUMBER: 121:111943
 TITLE: Purification of 3-cyano-3,5,5-trimethyl-1-cyclohexanone
 INVENTOR(S): Terasawa, Shoichi; Yamamoto, Masahiro
 PATENT ASSIGNEE(S): Asahi Chemical Ind, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06065183	A2	19940308	JP 1992-225631	19920825

PRIORITY APPLN. INFO.: JP 1992-225631 19920825

AB The title compound (I), prepared by the base-catalyzed addition reaction of HCN with isophorone, is purified by adding an inert compound having a higher b.p. than I and compatible with I, removing the basic catalyst, high-boiling impurities, and the inert compound in a thin-film evaporator, and separating isophorone from I in a distillation column. A reaction product (180 g) containing isophorone 18.02, I 80.9, high-boiling impurities 1.0, and NaOH 0.08% was mixed with 3 g polyethylene glycol (II; mol. weight 400) and fed to a thin-film evaporator to give 177.3 g fraction containing 18.2% isophorone and 81.8% I (for separation by distillation) and 5.7 g fraction containing II 53, isophorone 3, and I 10%.

L8 ANSWER 8 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:511942 CAPLUS
 DOCUMENT NUMBER: 121:111942
 TITLE: Purification of 3-cyano-3,5,5-trimethyl-1-cyclohexanone
 INVENTOR(S): Terasawa, Shoichi; Kondo, Yoshikimi
 PATENT ASSIGNEE(S): Asahi Chemical Ind, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06065182	A2	19940308	JP 1992-215834	19920813
PRIORITY APPLN. INFO.:			JP 1992-160927	19920619

AB The title compound (I), prepared by the alkali-catalyzed addition reaction of HCN with isophorone is purified by neutralizing the catalyst with an acid and distilling the mixture A reaction mixture containing I 60.5, isophorone 38, and KOH 0.30 mol was neutralized with H₂SO₄ and distilled (540 parts) in vacuo to give 226 parts distillate containing 12.7% I and 87.3% isophorone and 286 parts crystalline fraction containing 99.5% I.

L8 ANSWER 9 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1993:670685 CAPLUS
 DOCUMENT NUMBER: 119:270685
 TITLE: Process for the continuous preparation of 3-cyano-3,5,5-trimethylcyclohexanone
 INVENTOR(S): Pander, Hans Joachim; Siegel, Hardo; Woerz, Otto
 PATENT ASSIGNEE(S): BASF A.-G., Germany
 SOURCE: Eur. Pat. Appl., 6 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 554786	A1	19930811	EP 1993-101250	19930128
EP 554786	B1	19951129		
R: BE, DE, FR, GB, NL				
DE 4203456	A1	19930812	DE 1992-4203456	19920207
US 5254711	A	19931019	US 1993-14171	19930205
JP 06122667	A2	19940506	JP 1993-18562	19930205
JP 3241472	B2	20011225		
PRIORITY APPLN. INFO.:			DE 1992-4203456	A 19920207
OTHER SOURCE(S): CASREACT 119:270685				

AB The title process comprises condensation of isophorone with HCN in a 2-stage flow reactor system comprising an initial stage wherein complete mixing is provided and a second stage wherein mixing is suppressed. Thus, operation at 150° in both stages gave 96.5% the title compound

L8 ANSWER 10 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1993:652567 CAPLUS
 DOCUMENT NUMBER: 119:252567
 TITLE: Process for the preparation of 3-cyano-3,5,5-trimethylcyclohexanone
 INVENTOR(S): Woodbury, Richard P.; Thunberg, Jon C.; Vankouwenberg, Steven P.; Begonis, Walter B.
 PATENT ASSIGNEE(S): Hampshire Chemical Corp., USA
 SOURCE: U.S., 10 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5235089	A	19930810	US 1992-843867	19920227
AU 9333783	A1	19930902	AU 1993-33783	19930225
AU 660765	B2	19950706		
CA 2090555	AA	19930828	CA 1993-2090555	19930226
EP 558332	A1	19930901	EP 1993-301451	19930226
EP 558332	B1	19960529		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, PT, SE				
JP 06016612	A2	19940125	JP 1993-61314	19930226
AT 138642	E	19960615	AT 1993-301451	19930226
ES 2088225	T3	19960801	ES 1993-301451	19930226

PRIORITY APPLN. INFO.: US 1992-843867 19920227

AB The title process giving title compound with high yield and low impurity comprises reacting isophorone with HCN in the presence of LiCN catalyst at 80-115° while maintaining the HCN at a controlled rate (to prevent the generation of free LiOH, diisophorone, its nitrile derivs., and HCN polymer); and adding an acid selected from malic acid, oxalic acid, sulfuric acid, and phosphoric acid to precipitate the Li salt.

L8 ANSWER 11 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:233534 CAPLUS

DOCUMENT NUMBER: 118:233534

TITLE: Catalyst and process for the production of 3-cyano-3,5,5-trialkylcyclohexanone

INVENTOR(S): Forguy, Christian; Goetz, Frederick J.; Graeber, Edward L.; Lindstrom, Michael J.

PATENT ASSIGNEE(S): Elf Atochem North America, Inc., USA

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5183915	A	19930202	US 1992-846364	19920305
EP 558799	A2	19930908	EP 1992-117471	19921013
EP 558799	A3	19950215		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CA 2080646	AA	19930906	CA 1992-2080646	19921015
JP 05294918	A2	19931109	JP 1992-314450	19921030
CN 1075954	A	19930908	CN 1992-112660	19921103

PRIORITY APPLN. INFO.: US 1992-846364 19920305

OTHER SOURCE(S): MARPAT 118:233534

AB Title compound is prepared by reaction of 3,5,5-tris(C1-4 alkyl)cyclohexanone with HCN in the absence of H₂O and in the presence of quaternary ammonium- or phosphonium cyanide catalyst at 900-120° and 1-3 bar pressure. Isophorone and Et₄N⁺CN⁻ was heated to 105° followed by addition of HCN after which the temperature was increased to 112° and kept at 1102 for 1 h with stirring to give 3-cyclohexa-3,5,5-trimethylcyclohexanone.

L8 ANSWER 12 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:59336 CAPLUS

DOCUMENT NUMBER: 118:59336
TITLE: Preparation of 3-cyano-3,5,5-trimethylcyclohexanone
INVENTOR(S): Tabei, Nobuaki; Mizuno, Tadashi; Okamura, Haruki
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04253948	A2	19920909	JP 1991-15229	19910206

PRIORITY APPLN. INFO.: JP 1991-15229 19910206
OTHER SOURCE(S): CASREACT 118:59336; MARPAT 118:59336
AB The title compound (I) is prepared by treating isophorone (II) with HCN in the presence of R₂N:C(NR₁₂)₂ (III; R₁, R₂ = H, C1-4 alkyl). A mixture of II and III (R₁ = Me, R₂ = H) was treated dropwise with HCN at 105° over 3 h, then settled at 105° for 0.5 h to give 90.6% I.

L8 ANSWER 13 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:21969 CAPLUS
DOCUMENT NUMBER: 118:21969
TITLE: Preparation of 3-cyano-3,5,5-trimethylcyclohexanone
INVENTOR(S): Terasawa, Shoichi; Yamamoto, Tadatsugu
PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04279558	A2	19921005	JP 1991-4451	19910118

PRIORITY APPLN. INFO.: JP 1991-4451 19910118
AB The title compound (I) is prepared by treating isophorone with HCN in the presence of basic catalysts and water. A mixture of isophorone and aqueous NaOH was treated dropwise with HCN, then stirred at 170° to give I in 100% selectivity at 47.6% conversion.

L8 ANSWER 14 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:570855 CAPLUS
DOCUMENT NUMBER: 117:170855
TITLE: Preparation of 3-cyano-3,5,5-trimethylcyclohexanone
INVENTOR(S): Terasawa, Shoichi; Yamamoto, Tadatsugu
PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 04164057 A2 19920609 JP 1990-285816 19901025
 PRIORITY APPLN. INFO.: JP 1990-285816 19901025
 OTHER SOURCE(S): CASREACT 117:170855
 AB The title compds. (I), useful as material for 1-amino-3-aminomethyl-3,5,5-trimethylcyclohexane and 1-isocyanato-3-(isocyanatomethyl)-3,5,5-trimethylcyclohexane, is prepared by treating isophorone (II) with HCN in 1,3-dimethyl-2-imidazolidinone (III) in the presence of basic catalysts. A mixture of II and K₂CO₃ in III was treated dropwise with HCN at 110° over 4 h, then treated at 110° for 1 h to give I in 94% selectivity at 88% conversion.

L8 ANSWER 15 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1992:492650 CAPLUS
 DOCUMENT NUMBER: 117:92650
 TITLE: Manufacture of 3-cyano-3,5,5-trimethylcyclohexanone
 INVENTOR(S): Terasawa, Shoichi; Yamamoto, Tadatsugu
 PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04112862	A2	19920414	JP 1990-232491	19900904
PRIORITY APPLN. INFO.:			JP 1990-232491	19900904
AB Title compound (I) is manufactured from isophorone and HCN at 60-160° in Me ₂ SO and/or DMF over a base catalyst. Thus, treating 1 mol isophorone with 1 mol HCN in Me ₂ SO in the presence of K ₂ CO ₃ at 110° gave 85% I vs. 41% in ethylene glycol.				

L8 ANSWER 16 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1992:425974 CAPLUS
 DOCUMENT NUMBER: 117:25974
 TITLE: Preparation of bis-(3-cyano-3,5,5-trimethylcyclohexylidene)azine and its conversion to 3-(aminomethyl)-3,5,5-trimethylcyclohexylamine
 INVENTOR(S): Huthmacher, Klaus; Schmitt, Hermann
 PATENT ASSIGNEE(S): Degussa A.-G., Germany
 SOURCE: Eur. Pat. Appl., 11 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 482347	A2	19920429	EP 1991-115713	19910917
EP 482347	A3	19920819		
EP 482347	B1	19930609		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL				
DE 4033609	A1	19920507	DE 1990-4033609	19901023
DE 4033609	C2	19920910		
DE 4119577	A1	19921217	DE 1991-4119577	19910614
AT 90335	E	19930615	AT 1991-115713	19910917
ES 2059008	T3	19941101	ES 1991-115713	19910917

JP 04264057 A2 19920918 JP 1991-273630 19911022
US 5166396 A 19921124 US 1991-785323 19911023
US 5166444 A 19921124 US 1992-848390 19920309
PRIORITY APPLN. INFO.: DE 1990-4033609 19901023
DE 1991-4119577 19910614
EP 1991-115713 19910917
US 1991-785323 19911023

OTHER SOURCE(S): CASREACT 117:25974
AB The title azine, prepared in 92.7% yield from 1,3,3-trimethyl-5-oxocyclohexanecarbonitrile and N₂H₄ in MeOH, was hydrogenated in MeOH-NH₃ in the presence of Raney Ni and CoCl₂ to give 91.2% title amine.

L8 ANSWER 17 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:514033 CAPLUS
DOCUMENT NUMBER: 115:114033
TITLE: Process for the preparation of 1,3,3-trimethyl-5-oxo-cyclohexanecarbonitrile
INVENTOR(S): Huthmacher, Klaus; Schmitt, Hermann
PATENT ASSIGNEE(S): Degussa A.-G., Germany
SOURCE: Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 433615	A1	19910626	EP 1990-120672	19901029
EP 433615	B1	19931208		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
DE 3942371	A1	19910627	DE 1989-3942371	19891221
DE 3942371	C2	19920521		
ES 2060893	T3	19941201	ES 1990-120672	19901029
US 5091554	A	19920225	US 1990-622786	19901205
JP 06128214	A2	19940510	JP 1990-402612	19901217
JP 07091256	B4	19951004		
CA 2032667	AA	19910622	CA 1990-2032667	19901219
CA 2032667	C	19960917		

PRIORITY APPLN. INFO.: DE 1989-3942371 19891221

OTHER SOURCE(S): CASREACT 115:114033

AB A process for the preparation of 1,3,3-trimethyl-5-oxo-1-cyclohexanecarbonitrile (I) comprises the addition of HCN to isophorone in the presence of an alkali compound (LiOH) as catalyst at 100-160°; 0.0005-5 mol% catalyst are used with resp. to isophorone. HCN (40.5 g) was added to a mixture of isophorone (345 g) and LiOH (0.8 g) at 135° to give 89.1% I.

L8 ANSWER 18 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:470990 CAPLUS
DOCUMENT NUMBER: 115:70990
TITLE: Process for the preparation of 3-cyano-3,5,5-trimethylcyclohexanone by addition of hydrogen cyanide to isophorone
INVENTOR(S): Thunberg, Jon C.; Begonis, Walter B.
PATENT ASSIGNEE(S): W. R. Grace and Co., USA
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5011968	A	19910430	US 1990-475051	19900206
CA 2034640	AA	19910807	CA 1991-2034640	19910121
			US 1990-475051	19900206

PRIORITY APPLN. INFO.:

AB The title compound (I), i.e. isophorone nitrile, is prepared by (a) reacting isophorone (II) with HCN in the presence of a quaternary ammonium hydroxide in a molar ratio of II:HCN:catalyst of (.apprx.2.00-3.00):1.00:(0.005-0.01) at a least 110°; (b) decomposing the remaining catalyst by heating the reaction mixture at .apprx.110-150°; (c) sparging with an inert gas at 100-200° to remove the catalyst decomposition product) and (d) acidifying the mixture with an acid and sparging with an inert gas to eliminate residual HCN. Thus, 172 lb II was charged via vacuum to a reactor of an apparatus (illustrated therein), N was introduced to break the vacuum, II was heated to 110°, 1.11 lb of 25% aqueous Me₄N+OH⁻ was added, and HCN was added, and the reaction was allowed to proceed to give I.

L8 ANSWER 19 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1991:448914 CAPLUS
DOCUMENT NUMBER: 115:48914
TITLE: Preparation of 3-cyano-3,5,5'-trimethyl-1-cyclohexanone from isophorone and an alkaline cyanide
INVENTOR(S): Pontoglio, Enrico; Parodi, Sandro
PATENT ASSIGNEE(S): Caffaro S.p.A., Italy
SOURCE: Eur. Pat. Appl., 5 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 425806	A1	19910508	EP 1990-117995	19900919
EP 425806	B1	19940601		
R: CH, DE, ES, FR, LI, NL				
ES 2054185	T3	19940801	ES 1990-117995	19900919
US 5142090	A	19920825	US 1990-585240	19900920
JP 03153656	A2	19910701	JP 1990-298751	19901102

PRIORITY APPLN. INFO.:

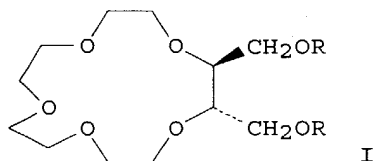
IT 1989-22246

19891102

AB The title compound (I), which is used as a hardener for epoxy resins and as a monomer for polyurethane and polyamide resins, is prepared by reaction of isophorone (II) with an equivalent amount of an alkaline cyanide in a homogeneous

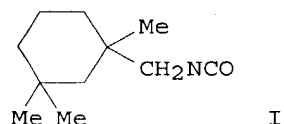
water/organic solvent solution at 20° to reflux temperature while maintaining a pH between 14-8 by a gradual addition of an inorg. acid during the reaction. Thus, II 553, DMF 600, and an aqueous NaCN 600 parts were heated at 90-92° with stirring while adding 85% H₃PO₄ and after 2 h the feeding of the acid was stopped and the temperature was raised to 104-105° allowing the reaction to complete for another 2 h. The reaction mixture was brought to pH 5.5 with 85% H₃PO₄ and the upper layer containing I was removed and then distilled on a Vigreux column to give 78% I of 97% purity.

L8 ANSWER 20 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1989:439343 CAPLUS
 DOCUMENT NUMBER: 111:39343
 TITLE: Applications of phase-transfer catalysis. Part 45.
 Enantioselective phase-transfer catalysis by optically
 active crown ethers
 AUTHOR(S): Dehmlow, Eckehard V.; Sauerbier, Christiane
 CORPORATE SOURCE: Fak. Chem., Univ. Bielefeld, Bielefeld, D-4800/1, Fed.
 Rep. Ger.
 SOURCE: Liebigs Annalen der Chemie (1989), (2), 181-5
 CODEN: LACHDL; ISSN: 0170-2041
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 111:39343
 GI



AB Chiral crown ethers I (R = H, R1CO; R1 = Ph, substituted Ph) were prepared as chiral phase-transfer catalysts. I induced asymmetry in the epoxidn. of alkenones and in their reaction with HOCMe2CN. The maximum enantiomeric excess, 45%, was obtained in the reaction of (E)-PhCH:CHCOPh with HOCMe2CN in the presence of I (R = 2,4-Cl2C6H3CO).

L8 ANSWER 21 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1987:190539 CAPLUS
 DOCUMENT NUMBER: 106:190539
 TITLE: Guinea pig pulmonary response to sensitization by five
 preformed monoisocyanate-ovalbumin conjugates
 AUTHOR(S): De Ceaurriz, Jacques; Ducos, Philippe; Micillino, Jean
 Claude; Gaudin, Rene; Cavelier, Claude
 CORPORATE SOURCE: Inst. Natl. Rech. Sec., Vandoeuvre, 54500, Fr.
 SOURCE: Toxicology (1987), 43(1), 93-101
 CODEN: TXCYAC; ISSN: 0300-483X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB The ability of 5 dissimilar monoisocyanates conjugated to ovalbumin (OA) as a carrier protein to induce pulmonary hypersensitivity towards the hapten specific component was assessed by using a previously described

method based on the determination of a respiratory index (RI) in the guinea pig.

The test chemical included p-tolyl [622-58-2] and hexylmonoisocyanate [2525-62-4] (TMI and HMI), 4-isocyanatodiphenylmethane (IDM) [1823-37-6], 4-isocyanato-4'-methyldiphenylmethane (IMDM) [107997-84-2], and 1-isocyanatomethyl-1,3,3-trimethylcyclohexane (IMTC) (I) [107997-85-3]. Guinea pigs were exposed daily to an aerosol of the OA conjugate of each monoisocyanate up to ≤ 15 days. Increases in respiratory rate and/or respiratory collapse occurred in the guinea pigs exposed to TMI-OA and HMI-OA conjugates by days 9 and 15, with RI values of 155 and 177, resp.. The greatest mean RI values in guinea pigs exposed to IDM-OA, IMDM-OA, and IMTC-OA conjugates to day 15 were 20, 25, and 22, resp., and were not indicative of any pulmonary reaction. Guinea pigs exposed in parallel to each test conjugate did not exhibit any pulmonary reaction when they were exposed to OA on the challenge days. All these findings evidence pulmonary hypersensitivity as the result of exposure to TMI-OA and HMI-OA conjugates and suggest a high degree of conjugation and strong linkage of all the monoisocyanates with OA. The difference between the number of days to the onset of pulmonary reaction to TMI-OA and HMI-OA conjugates, and the lack of pulmonary reaction to IDM-OA, IMDM-OA, and IMTC-OA conjugates within the exptl. period suggest the influence of the nature of the haptenic portion on the lapse of time required for pulmonary response to OA preformed conjugates and point to the possibility of discriminating between the allergenic potential of the test materials on this basis.

L8 ANSWER 22 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1986:442383 CAPLUS
DOCUMENT NUMBER: 105:42383
TITLE: 3-Cyano-3,5,5-trimethylcyclohexanone
INVENTOR(S): Kondo, Kenji; Kosai, Hiroshi; Shidara, Hideo
PATENT ASSIGNEE(S): Nippon Chemicals Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61033157	A2	19860217	JP 1984-153231	19840725
JP 05033217	B4	19930519		

PRIORITY APPLN. INFO.: JP 1984-153231 19840725

OTHER SOURCE(S): CASREACT 105:42383

AB The title compound (I), useful as epoxy resin hardener, material for elastomers, polyurethane paints, etc. (no data), was prepared by reaction of isophorone (II) and HCN over quaternary ammonium hydroxide or quaternary phosphonium hydroxide. Thus, HCN was added dropwise to mixture of II, Bu₄NOH, and H₂O with stirring at 110° for 3 h and the resulting mixture allowed to stand at 110° for 1 h to give 94.9% I based on HCN.

L8 ANSWER 23 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1986:442382 CAPLUS
DOCUMENT NUMBER: 105:42382
TITLE: 3-Cyano-3,5,5-trimethylcyclohexanone
INVENTOR(S): Kondo, Kenji; Kosai, Hiroshi; Shidara, Hideo
PATENT ASSIGNEE(S): Nippon Chemicals Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61033158	A2	19860217	JP 1984-153233	19840725
JP 04081583	B4	19921224		

PRIORITY APPLN. INFO.: JP 1984-153233 19840725

OTHER SOURCE(S): CASREACT 105:42382

GI For diagram(s), see printed CA Issue.

AB The title compound (I), useful as an epoxy resin hardener and material for elastomers, polyurethane paint, etc. (no data), was prepared by treating isophorone (II) with HCN in presence of diazabicycloalkenes III ($n = 2-11$, $m = 2-6$; both rings may have lower alkyl substituents). Thus, III was added dropwise to II containing 1,8-diazabicyclo[5.4.0]undecene with stirring at 110° for 3 h and the resulting mixture held at 110° for 1 h to give 96.5% I based on HCN.

L8 ANSWER 24 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1982:615625 CAPLUS

DOCUMENT NUMBER: 97:215625

TITLE: 3-Cyano-3,5,5-trimethylcyclohexanone

PATENT ASSIGNEE(S): Nitto Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

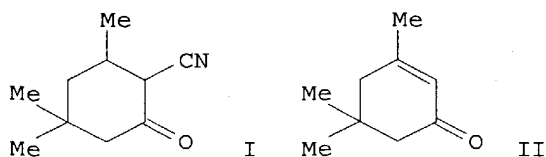
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57116038	A2	19820719	JP 1981-2102	19810112
JP 62005418	B4	19870204		

PRIORITY APPLN. INFO.: JP 1981-2102 19810112

GI



AB 3-Cyano-3,5,5-trimethylcyclohexanone (I) was prepared by reaction of isophorone (II) with HCN at 50-150° in the presence of bases and glycols. Thus, 27.5 parts HCN was added to a mixture of II 351.5, Na₂CO₃ 2.7, and (HOCH₂)₂ 25 parts over 3 h at 100° to give, after 0.5 h, 92.9% I.

L8 ANSWER 25 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1982:597874 CAPLUS

DOCUMENT NUMBER: 97:197874
 TITLE: A novel conjugate hydrocyanation with titanium tetrachloride-tert-butyl isocyanide
 AUTHOR(S): Ito, Yoshihiko; Kato, Hidehito; Imai, Hiroshi; Saegusa, Takeo
 CORPORATE SOURCE: Fac. Eng., Kyoto Univ., Kyoto, 606, Japan
 SOURCE: Journal of the American Chemical Society (1982), 104(23), 6449-50
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 97:197874
 AB Conjugate hydrocyanation of α,β -unsatd. ketones is achieved in high yields by means of Me₃CNC with TiCl₄. Stereochem. of the conjugate hydrocyanation, which seems to be kinetically controlled, is demonstrated by the reactions of $\Delta^4(10)$ -octalin-3-one and 9-methyl- $\Delta^4(10)$ -octalin-3-one with TiCl₄-Me₃CNC, producing a 9:1 mixture of trans- and cis-10-cyano-octalin-3-one and a 7:3 mixture of trans- and cis-10-cyano-9-methyloctalin-3-one, resp. The conjugate hydrocyanation may be explained in terms of nucleophilic β -addition of Me₃CNC onto enone activated by TiCl₄, followed by β -elimination of tert-Bu cation to give β -cyanoketone. Conjugate hydrocyanations of α,β -unsatd. aldehyde and ester are also achieved in moderate yields by EtAlCl₂-Me₃CNC system and AlCl₃-Me₃CNC system, resp.

L8 ANSWER 26 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1981:514904 CAPLUS
 DOCUMENT NUMBER: 95:114904
 TITLE: 3-Cyano-3,5,5-trimethylcyclohexanone
 INVENTOR(S): Dubreux, Bernard
 PATENT ASSIGNEE(S): Produits Chimiques Ugine Kuhlmann, Fr.
 SOURCE: Eur. Pat. Appl., 10 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 28179	A1	19810506	EP 1980-401455	19801010
EP 28179	B1	19821103		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
FR 2468584	A1	19810508	FR 1979-26596	19791026
FR 2468584	B1	19840511		
US 4299775	A	19811110	US 1980-185989	19800910
JP 56071057	A2	19810613	JP 1980-133078	19800926
JP 01047459	B4	19891013		
AT 1746	E	19821115	AT 1980-401455	19801010
ES 496269	A1	19811001	ES 1980-496269	19801024
PRIORITY APPLN. INFO.:			FR 1979-26596	19791026
			EP 1980-401455	19801010

AB Isophorone reacted with metal cyanides and phase transfer agents to give the title compound (I). Thus, isophorone was heated with NaCN and Me(CH₂)₁₁N⁺(CH₂Ph)Me₂ Br⁻ in water to yield I.

L8 ANSWER 27 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1981:138907 CAPLUS
 DOCUMENT NUMBER: 94:138907

TITLE: Stereochemistry. LII. Orbital verification of reaction stereochemistry. III. The effects of β -fluoro and β -cyano groups on the stereochemistry and kinetics of the reduction of cyclohexanones by lithium tri-tert-butoxyaluminum hydride

AUTHOR(S): Agami, C.; Kazakos, A.; Levisalles, J.; Sevin, A.
 CORPORATE SOURCE: Lab. Chim. Org., Univ. Paris VI, Paris, 5, Fr.
 SOURCE: Tetrahedron (1980), 36(20-21), 2977-81
 CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal
 LANGUAGE: French

AB The effects were studied of β -fluoro and β -cyano groups on the kinetics and stereoselectivity of the reduction of ketones by $\text{Li}(\text{Me}_3\text{CO})_3\text{AlH}$ in the presence of and absence of cryptands, $\text{Me}(\text{CH}_2)_7\text{F}$, and MeCN . The results were discussed in relation to ab initio MO calcns. on the analogous carbonyl compds., $\text{H}_2\text{CRCH}_2\text{CHO}$ ($\text{R} = \text{H}, \text{F}, \text{CN}$).

L8 ANSWER 28 OF 28 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1966:447345 CAPLUS
 DOCUMENT NUMBER: 65:47345
 ORIGINAL REFERENCE NO.: 65:8793d
 TITLE: Synthesis of 3-cyano-3,5,5-trimethylcyclohexanone
 PATENT ASSIGNEE(S): Scholven-Chemie A.-G.
 SOURCE: 8 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 6513694		19660425	NL	
PRIORITY APPLN. INFO.: DE 19641024				
AB The title compound (I) can be prepared batch-wise or continuously from isophorone, HCN, and 10-1-10-3% alkaline catalyst at 110-200°. Thus, a mixture of 50 l. isophorone, 20 l. HCN, and 280 ml. 15% NaOH in MeOH is heated to 150°, 12.5 l. HCN is added in 4 hrs., and the mixture stirred 0.5 hr., washed with 0.65% HNO_3 solution to remove the alkaline catalyst, and distilled to yield 10.3 kg. isophorone, 96.2% I, and 1.6 kg. residue. A detailed description of a continuous process is given.				

=> d L9 1-7 ibib abs

L9 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:386596 CAPLUS
 DOCUMENT NUMBER: 140:391385
 TITLE: Regioselective hydrocyanation process for the calcium oxide-catalyzed preparation of isophorone nitrile from **hydrogen cyanide** and isophorone

INVENTOR(S): Kunsmann-Keitel, Dagmar; Braun, Gerold; Muenster, Ingo; Munding, Klaus; Scherhag, Gunter; Siegel, Wolfgang

PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
 SOURCE: Eur. Pat. Appl., 5 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent

— Same

LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1418172	A2	20040512	EP 2003-25652	20031107
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
DE 10251680	A1	20040519	DE 2002-10251680	20021107
JP 2004155785	A2	20040603	JP 2003-375444	20031105
US 2004092761	A1	20040513	US 2003-701513	20031106
PRIORITY APPLN. INFO.:			DE 2002-10251680 A	20021107
AB A regioselective hydrocyanation process for the calcium oxide-catalyzed preparation of isophorone nitrile from hydrogen cyanide and isophorone is presented in which the calcium oxide regioselective hydrocyanation catalyst has a BET surface area of >1.5 m ² /g.				

L9 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:96029 CAPLUS
DOCUMENT NUMBER: 132:124501
TITLE: Hydrocyanation process and catalyst for the preparation of 3-cyano-3,5,5-trimethylcyclohexanone from isophorone and **hydrogen cyanide**
INVENTOR(S): Fischer, Jakob; Siegel, Wolfgang; Bomm, Volker; Fischer, Martin; Munding, Klaus
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6022988	A	20000208	US 1999-372062	19990811
DE 19836474	A1	20000217	DE 1998-19836474	19980812
EP 985659	A1	20000315	EP 1999-115469	19990805
EP 985659	B1	20031029		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			DE 1998-19836474 A	19980812
AB 3-Cyano-3,5,5-trimethylcyclohexanone is prepared in high yield and selectivity by reacting isophorone with hydrogen cyanide at 80-220° in the presence of the betaine catalyst 1,3-dimethylimidazolium-4-carboxylate.				
REFERENCE COUNT:	12	THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

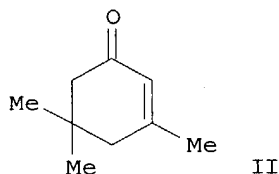
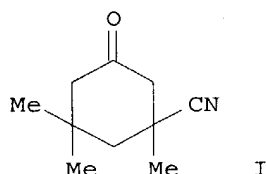
L9 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:907770 CAPLUS
DOCUMENT NUMBER: 123:313436
TITLE: Process for the preparation of 3-cyano-3,5,5-trimethylcyclohexanone [isophorone nitrile]
INVENTOR(S): Munding, Klaus; Laqua, Gerhard; Witzel, Tom; Merger, Franz
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: Eur. Pat. Appl., 8 pp.

DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

CODEN: EPXXDW

1995

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 671384	A1	19950913	EP 1995-102923	19950302
EP 671384	B1	19991103		
R: BE, DE, FR, GB				
DE 4407487	A1	19950914	DE 1994-4407487	19940307
US 5516928	A	19960514	US 1995-395322	19950228
PRIORITY APPLN. INFO.:			DE 1994-4407487	19940307
OTHER SOURCE(S):			CASREACT 123:313436; MARPAT 123:313436	
GI				



AB The title compound (I), an intermediate for the monomer isophoronediamine, is prepared by a method using improved catalysts. Thus, isophorone (II) reacts with HCN to give I, at 80-180° and 0.5-20 bar, in the presence of an ammonium salt catalyst R₁R₂R₃R₄N⁺ X⁻ [R₁-R₄ = C₁-18 alkyl, C₅-8 cycloalkyl, aryl, C₇-18 aralkyl, C₂-18 hydroxyalkyl; X = OCO₂H, or OCO₂R₄ where R₄ = C₁-8 alkyl]. For example, a mixture of 3 mol HCN and 1.5 mol II was added over 60 min to a mixture of 4.5 mol II and 30 mmol Me₄N⁺ MeOCO₂⁻ at 120°. Acidification with 3.5 g 85% H₃PO₄ and distillation at 0.1 mbar gave I in 99% or 96.2% yield (based on unreacted II or fed HCN, resp.). In comparison, use of Et₄N⁺ CN⁻ catalyst gave 89.6% yield based on fed HCN. Also used as catalysts were BuMe₃N⁺ MeOCO₂⁻, and Et₃MeN⁺ MeOCO₂⁻, which gave similar results.

L9 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1994:511943 CAPLUS
 DOCUMENT NUMBER: 121:111943
 TITLE: Purification of 3-cyano-3,5,5-trimethyl-1-cyclohexanone
 INVENTOR(S): Terasawa, Shoichi; Yamamoto, Masahiro
 PATENT ASSIGNEE(S): Asahi Chemical Ind, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06065183	A2	19940308	JP 1992-225631	19920825

PRIORITY APPLN. INFO.:

JP 1992-225631

19920825

AB The title compound (I), prepared by the base-catalyzed addition reaction of **HCN** with isophorone, is purified by adding an inert compound having a higher b.p. than I and compatible with I, removing the basic catalyst, high-boiling impurities, and the inert compound in a thin-film evaporator, and separating isophorone from I in a distillation column. A reaction product

(180

g) containing isophorone 18.02, I 80.9, high-boiling impurities 1.0, and NaOH 0.08% was mixed with 3 g polyethylene glycol (II; mol. weight 400) and fed to a thin-film evaporator to give 177.3 g fraction containing 18.2% isophorone and 81.8% I (for separation by distillation) and 5.7 g fraction containing II

53,

isophorone 3, and I 10%.

L9 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1994:511942 CAPLUS

DOCUMENT NUMBER:

121:111942

TITLE:

Purification of 3-cyano-3,5,5-trimethyl-1-cyclohexanone

INVENTOR(S):

Terasawa, Shoichi; Kondo, Yoshikimi

PATENT ASSIGNEE(S):

Asahi Chemical Ind, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06065182	A2	19940308	JP 1992-215834	19920813

PRIORITY APPLN. INFO.:

JP 1992-160927

19920619

AB The title compound (I), prepared by the alkali-catalyzed addition reaction of **HCN** with isophorone is purified by neutralizing the catalyst with an acid and distilling the mixture. A reaction mixture containing I 60.5, isophorone

38, and KOH 0.30 mol was neutralized with H₂SO₄ and distilled (540 parts) in vacuo to give 226 parts distillate containing 12.7% I and 87.3% isophorone and 286 parts crystalline fraction containing 99.5% I.

L9 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1993:670685 CAPLUS

DOCUMENT NUMBER:

119:270685

TITLE:

Process for the continuous preparation of 3-cyano-3,5,5-trimethylcyclohexanone

INVENTOR(S):

Pander, Hans Joachim; Siegel, Hardo; Woerz, Otto

PATENT ASSIGNEE(S):

BASF A.-G., Germany

SOURCE:

Eur. Pat. Appl., 6 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 554786	A1	19930811	EP 1993-101250	19930128
EP 554786	B1	19951129		

R: BE, DE, FR, GB, NL

DE 4203456 A1 19930812 DE 1992-4203456 19920207
US 5254711 A 19931019 US 1993-14171 19930205
JP 06122667 A2 19940506 JP 1993-18562 19930205
JP 3241472 B2 20011225

PRIORITY APPLN. INFO.: DE 1992-4203456 A 19920207

OTHER SOURCE(S): CASREACT 119:270685

AB The title process comprises condensation of isophorone with **HCN** in a 2-stage flow reactor system comprising an initial stage wherein complete mixing is provided and a second stage wherein mixing is suppressed. Thus, operation at 150° in both stages gave 96.5% the title compound

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cat is
used*

L9 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:652567 CAPLUS

DOCUMENT NUMBER: 119:252567

TITLE: Process for the preparation of 3-cyano-3,5,5-trimethylcyclohexanone

INVENTOR(S): Woodbury, Richard P.; Thunberg, Jon C.; Vankouwenberg, Steven P.; Begonis, Walter B.

PATENT ASSIGNEE(S): Hampshire Chemical Corp., USA

SOURCE: U.S., 10 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5235089	A	19930810	US 1992-843867	19920227
AU 9333783	A1	19930902	AU 1993-33783	19930225
AU 660765	B2	19950706		
CA 2090555	AA	19930828	CA 1993-2090555	19930226
EP 558332	A1	19930901	EP 1993-301451	19930226
EP 558332	B1	19960529		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, PT, SE				
JP 06016612	A2	19940125	JP 1993-61314	19930226
AT 138642	E	19960615	AT 1993-301451	19930226
ES 2088225	T3	19960801	ES 1993-301451	19930226

PRIORITY APPLN. INFO.: US 1992-843867 19920227

AB The title process giving title compound with high yield and low impurity comprises reacting isophorone with **HCN** in the presence of **LiCN** catalyst at 80-115° while maintaining the **HCN** at a controlled rate (to prevent the generation of free LiOH, diisophorone, its nitrile derivs., and **HCN** polymer); and adding an acid selected from malic acid, oxalic acid, sulfuric acid, and phosphoric acid to precipitate the Li salt.

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=> d his

(FILE 'HOME' ENTERED AT 15:09:39 ON 17 JUN 2004)

FILE 'REGISTRY' ENTERED AT 15:10:00 ON 17 JUN 2004

L1 1 S ISOPHORONENITRILE/CN

L2 1 S ISOPHORONE/CN

FILE 'CASREACT' ENTERED AT 15:13:02 ON 17 JUN 2004

LiCN

CaO

L3 STRUCTURE UPLOADED
 L4 0 S L3
 L5 0 S L3 FULL

FILE 'CAPLUS' ENTERED AT 15:15:24 ON 17 JUN 2004

L6 88 S L1
 L7 2508 S L2
 L8 28 S L6 AND L7
 L9 18 S L8 AND (HCN OR HYDROGEN CYANIDE)
 L10 7 S L9 AND ?OXIDE

=> s L10 and (BET or Brunauer Emmett Teller)
 13208 BET
 2375 BRUNAUER
 34 EMETT
 15732 TELLER
 24 BRUNAUER EMETT TELLER
 (BRUNAUER(W) EMETT(W) TELLER)
 L11 1 L10 AND (BET OR BRUNAUER EMETT TELLER)

=> d L11

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:386596 CAPLUS
 DN 140:391385
 TI Regioselective hydrocyanation process for the calcium **oxide**
 -catalyzed preparation of isophorone nitrile from **hydrogen**
cyanide and isophorone
 IN Kunsmann-Keitel, Dagmar; Braun, Gerold; Muenster, Ingo; Mundinger, Klaus;
 Scherhag, Gunter; Siegel, Wolfgang
 PA BASF Aktiengesellschaft, Germany
 SO Eur. Pat. Appl., 5 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1418172	A2	20040512	EP 2003-25652	20031107
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
DE 10251680	A1	20040519	DE 2002-10251680	20021107
JP 2004155785	A2	20040603	JP 2003-375444	20031105
US 2004092761	A1	20040513	US 2003-701513	20031106
PRAI DE 2002-10251680	A	20021107		

=> d L11 ibib abs

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:386596 CAPLUS
 DOCUMENT NUMBER: 140:391385
 TITLE: Regioselective hydrocyanation process for the calcium
oxide-catalyzed preparation of isophorone
 nitrile from **hydrogen cyanide** and
 isophorone
 INVENTOR(S): Kunsmann-Keitel, Dagmar; Braun, Gerold; Muenster,
 Ingo; Mundinger, Klaus; Scherhag, Gunter; Siegel,
 Wolfgang

PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
SOURCE: Eur. Pat. Appl., 5 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1418172	A2	20040512	EP 2003-25652	20031107
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
DE 10251680	A1	20040519	DE 2002-10251680	20021107
JP 2004155785	A2	20040603	JP 2003-375444	20031105
US 2004092761	A1	20040513	US 2003-701513	20031106
PRIORITY APPLN. INFO.:			DE 2002-10251680 A	20021107
AB A regioselective hydrocyanation process for the calcium oxide -catalyzed preparation of isophorone nitrile from hydrogen cyanide and isophorone is presented in which the calcium oxide regioselective hydrocyanation catalyst has a BET surface area of >1.5 m ² /g.				